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03-162943

Jul. 12, 1991
LENS WITH ANTIREFLECTION FILM

L12: 1 of 1

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ABSTRACT:

PURPOSE: To increase resistance to scratching and resistance to wear without lowering low reflection characteristics by forming low reflective index films composed of a composite oxide as a main component containing one of Zr, Ri, Hf, Sn, Ta and In and at least one of Si and B as a part of a antireflection film.

CONSTITUTION: A multilayer antireflection film is formed by laminating low refractive index films for the odd number layers counted from the air side and high refractive index films for the even number layers counted from the air side. The low refractive index film is formed as an antireflection film composed of a composite oxide as a main component containing at least one of Zr, Ti, Hf, Sn, Ta and In and at least one of Si (silicon) and B (boron). Thus, superior lubricating properties and superior performances of high

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resistance to scratching and resistance to wear can be provided without lowering low reflection characteristics, since the film is scratching-free and hardly get marks by friction.